

Digital Library Transition Plan

September 17, 2007

## Purpose of this document

- To provide Montana State Library (MSL) management and staff a detailed explanation, process, and timeline for the orderly and successful transition from a walk-in facility to a virtual library that makes library resources remotely available via a computer.

## Background

The Montana State Library has a very broad statutory mandate about what kind of library assistance and information services to provide:

**22-1-103. State library commission -- authority. The state library commission may:**  
**(7) furnish, by contract or otherwise, library assistance and information services to state officials, state departments, and residents of those parts of the state inadequately serviced by libraries;** *Montana Code Annotated.*

The Montana State Library began to sharpen the focus of that broad mandate when it contracted Dr. Mary C. Bushing to write "*Evaluation of Montana State Library's Library and Information Services Department*" published in March 2004. Dr. Bushing's report recommended:

**"The acquisition of print material should cease in so far as possible with the exception of the following:**

- **Material in support of the library development role of the agency; and,**
- **State documents that are mandated function of the state library.**

**Print journals, reference books, newspapers, federal documents, should all be closely scrutinized with the purpose of reducing the physical collections and their growth. This would free staff time and space and move the information function still further into the virtual realm. There are few of these items that are not already acquired and maintained within Montana in other libraries."** *Evaluation of Montana State Library's Library and Information Services*, Bushing, Mary C., 2004, p. 4.

*The Montana State Library Strategic Plan 2006-2011* approved by the state library commission subsequently adopted the above evaluation recommendations. These recommendations would radically transform how the Library Information Services program operates, but they are justified.

**"The department cannot adequately achieve the goals for which they strive given the resources available. Attempting to fulfill the function of library as "place" with hours, walk-in services and collections while also being an effective facilitator in an efficient electronic or virtual resource environment for state government employees is too diversified a role in the circumstances."** Bushing, p. 4.

Mindful of our statutory obligations and Dr. Bushing's analysis, MSL staff have analyzed current operations, observed trends and activities in other states in response to similar pressures nationwide, and evaluated the tools available to libraries to assist them in building and managing digital repositories. We have developed a strategic plan approved by the Library Commission that provides the guidance necessary to institute the changes that are contemplated.

Over the past four years, we have laid the groundwork for the changes to come. During that time, we have licensed or subscribed to software, hardware, and service solutions that are candidates for eventual use by

MSL as its digital repository, developed procedures for agencies to transfer digital versions of publications to MSL, and met with depository libraries across the state to learn of their concerns and issues regarding the conversion from print to digital information management. MSL staff worked with a Permanent Public Access Committee comprising representatives of agencies across state government to update MSL's statutory mandate in light of current publishing practices.

Many factors combine to encourage MSL to complete the transition to a fully digital library at this time. These include:

- MSL's statutory mandate regarding public information produced by state agencies was updated by the 2007 legislature to provide clear guidance regarding the identification, acquisition, management, preservation, and access to electronic information.
- After years in development, tools are now available to support the work of state library and archive institutions regarding preservation of digital information.
- Many other states have begun the transition; MSL now has a pool of counterparts across the nation with whom to discuss and share best practices.
- MSL's project managers have become knowledgeable of the issues relating to preservation of digital information.

Ultimately, MSL's decision is driven by the agencies it serves. State agencies are now publishing primarily in electronic format, and MSL patrons increasingly expect that the information contained within the MSL collection is available at their desktop.

This Digital Library Transition Plan discusses each resource and service provided by Library Information Services and provides recommended actions and a timetable for completion. The plan provides specific detail of how the recommendations may be implemented and the consequences. A change, reduction, or elimination of a library resource often affects the delivery of another library resource or service. To make the implementation of the recommendations as smooth as possible, this document will serve as a guide for the order of the changes. This document also supports MSL's intention to make the transition from a predominantly print library to a digital library as coherent and coordinated as possible. The library staff needs the "big picture" of the strategic plan plus detailed guidelines found in this document about how to implement the recommendations. The profound changes in the way that MSL implements its statutory responsibilities will result in acquisition of more content and provide greater access for more Montanans. Equally important, these recommendations will allow the library to concentrate on its responsibility to preserve state government information that is currently vulnerable to loss or degradation that occurs each time a publication is handled or circulated.

General implementation timeline:

- Week of August 6, 2007 introduce this plan to Library and Information Services (LIS) staff. Incorporate their input. (Done)
- August 8, 2007 address, in general terms, the State Library Commission about implementing the transition plan. (Done)
- August 22, 2007 introduce current version of this plan to the entire MSL staff. (Done)
- During September/October introduce this plan to the governor's office, state agency librarians, state agency directors, state agency public information officers (PIOs), Lewis and Clark County library staff, and Montana Library Association (MLA) officers.
- November 1, 2007 make public announcement about the transition plan. Post notices in the building and on the MSL web. Invite the media.

- November 1, 2007 launch website explanation for the transition. Prepare to update the entire MSL website where necessary to reflect the changes to be implemented on January 1, 2008. Revise all MSL brochures as necessary.
- January 1, 2008, close stacks and discontinue other services associated with the library as public space, with exceptions as noted in the following analysis.
- By June 30, 2008, remove from collection and appropriately process the print versions of reference materials, journals, maps, non-fiction documents, and government (non-state) documents not intended to remain in collection.
- By June 30, 2008, be fully operational as a digital library.

In the analysis that follows, each resource and service provided by Library Information Services is considered separately.

## **I. Library Collection**

### **A. *State Publications***

Goals:

- Increase public access to state publications
- Ensure preservation of state publications
- Reduce staff time associated with maintaining and circulating a print collection.
- Increase staff time and expertise dedicated to maintaining a digital collection.
- Provide full-text access from the catalog for all publications. Provide key word search-ability for all state publication ever written by all agencies.

Current situation:

All state publications created today are “born digital.” Many are distributed in both print and digital formats. The trend, however, is towards digital only distribution or a very limited print run. Recent experience shows that patrons are increasingly turning to virtual services as opposed to utilizing print media. The infrastructure necessary to provide circulation for print state publications for a few patrons diverts MSL resources that are better dedicated towards providing digital access for many more patrons.

Nonetheless, print materials remain an archival standard with no equal in the digital world. Until a digital archival standard develops that surpasses printed format, MSL will continue to manage print materials.

Due to their shared responsibilities regarding state publications, both MSL and the Montana Historical Society (MHS) have partial collections of non-digital state publications. The MSL collection, intended to serve the information needs of state agency staff as well as the government information access needs of Montana citizens, circulates while the MHS collection, intended for permanent preservation purposes, does not. To date, the actions of these two agencies regarding state publications have been independent. For that reason, there may be duplication between the two collections or publications missing from both.

The trend towards state agencies publishing only in a digital format alters how MSL and MHS traditionally interact and how they manage their respective circulating and non-circulating collections. For example, the transfer or distribution of print material from

the circulating MSL collection to the non-circulating MHS collection does not have an equivalent process in the digital world. With digital publications there is no reason to “transfer” them. Rather MSL could assume primary responsibility for providing public access to the digital publications while MHS could focus on managing the non-digital repository. In any event, MSL will remain committed to being responsible for the identification, acquisition, cataloging, and distribution of print state publications. Furthermore, MSL will work with MHS to insure preservation and access to both print and digital state publications.

Recommendations:

- By November 1, 2007, negotiate an agreement with MHS that states that MSL will maintain an access and preservation copy of state publications in a digital repository while MHS will manage a non-digital repository that does not circulate.
- Beginning January 1, 2008, provide access to digital versions of state publications only. Find existing or create new digital versions of print publications upon patron request for access, and provide the patron access to the digital version. Hand off the print publications to MHS as they are digitized.
- Create or find digital versions for all state publications.
- Create a digitization plan that guides the digitization of the entire remaining non digital collection.
- By January 1, 2010, ensure full-text index access as well as catalog access to all items in the state publications collection.
- In accordance with the agreement negotiated with MHS, complete the transfer of the MSL print collection to MHS.

Needs:

- Scan in-house; purchase scanner suitable for routine on-demand digitization of state publications.
- Create
- Obtain or contract for scanning / OCR capabilities
- If decision is to scan in-house, obtain training in scanning, OCR, and digital file management for current circulation staff.
- Investigate the potential for digitizing the entire state publications collection.
- Obtain additional cataloging resources, through FTE or contract.

**B. *Professional library development (PLD)***

Goals:

- Improve the PLD collection to meet the needs of Montana librarians
- Improve access to the PLD collection.
- Reduce staff time associated with maintaining the PLD collection.

Discussion:

State library consultants increasingly are using digital resources instead of the print PLD collection. However, many PLD materials are not yet available electronically, necessitating continued maintenance of the print collection.

The PLD collection serves a very specialized patron base, Montana librarians. These patrons are often in the library at scheduled times, e.g. during conferences in Helena or meetings at MSL. In consideration of this patron base and their needs, the PLD collection may be managed separately from the other MSL collections specified in the strategic plan.

Recommendations:

- Immediately shift focus to acquire more digital and fewer print PLD resources.
- By January 1, 2008, relocate and segregate the PLD collection for easier management as a special collection with the following considerations:
  - Allow access.
  - Continue to circulate.
  - Train Library Development staff to check out and check in materials.
- During FY08, investigate the potential to contract with a Montana Shared Catalog public library to manage the PLD collection, with a goal of shifting the PLD collection to another library during FY09.
- By July 1, 2008, determine if PLD collection will be moved to another library or maintained at MSL.

### ***C. Natural Resource Information***

Goals:

- Provide access to natural resource content in support of the mandate of MSL's Natural Resource Information System (NRIS) . NRIS is aa comprehensive system for the acquisition, storage, and retrieval of information relating to the natural resources of Montana.
- Ensure state employees have access to natural resource information they need to do their jobs
- Reduce resources associated with managing print materials

Discussion:

Natural resource information is one of the three collection areas defined in the MSL strategic plan. MSL's Natural Resource Information System (NRIS) provides a component of this collection area, concentrating primarily on geospatial data layers and associated attribute information obtained from government agency databases, whereas LIS manages natural resource-related state publications, commercial databases, and journals. In addition, LIS has historically collected other natural resource related documents based on information access needs as perceived over time. MSL's collection plan is not specific as to what natural resource information, beyond state publications, should be included in the collection.

#### **1. Topographic Maps**

MSL's topographic maps collection is provided through the Federal Depository Library Program (FDLP). The maps get considerable use. These maps are also responsible for heavy use of the MSL copiers, used by patrons to duplicate sections of maps. We have no knowledge as to the relative amounts of use for personal reasons as opposed to work-related reasons. Commercial and public library sources exist for these same maps. Some state agencies manage their own sets, e.g. DNRC and DEQ. MSL will no longer receive USGS maps once we discontinue our FDLP status.

On-line versions of USGS quadrangle maps (topographic maps) are available through NRIS. The benefit of having print maps to complement the on-line versions is not well understood or documented.

Recommendations:

- November 1, 2007 post notice on the map cabinet that availability of print topographic maps will be discontinued on January 1, 2008.
- After January 1, 2008, offer print topographic maps to (agencies? libraries?)

## **2. Natural Resource Documents**

A number of natural resource documents that are not state publications are interfiled on the shelves of the state publications collection. A spot check indicates that some of these natural resource documents may be useful to state agencies and may be of limited availability. The reason for acquiring these particular documents is not documented nor does the current collection plan provide clear guidance for selecting natural resource documents that are not state publications.

Recommendations:

- As the state publications collection is reviewed, cataloged, and digitized, segregate non-state publication, natural resource related documents.
- By January 1, 2008, develop clear guidelines for selecting such documents.
- Review these segregated documents against these guidelines. Offer those that do not meet the guidelines to (Montana Historical Society? libraries? agencies?)
- For those natural resource documents that are not state publications that remain in the MSL collection, follow the recommendations for cataloging and digitizing set forth for state publications.

## ***D. Federal Depository Library Program***

Goal:

- Eliminate MSL staff time associated with managing a federal document collection that is available elsewhere.

Discussion:

A complete federal documents collection is available through the regional depository in Missoula and the seven other partial depository libraries in Montana including the State Law Library of Montana located in the same building as MSL. Federal documents can also be obtained through interlibrary loan when needed.

Recommendations:

- On November 1, 2007, announce withdrawal as a FDLP library.
- On November 1, 2007, notify the State Law Library and the Census and Economic Information Center (CEIC) that MSL is terminating MSL status as an affiliate library of the U.S. Census Bureau's State Data Center (SDC) and Business/Industry Data Center (BIDC) Program.

- Offer all federal documents to the regional depository. Do not retain Montana-specific documents in the MSL collection. Work with the regional depository library about the disposition of the federal document collection.
- By January 1, 2008 remove from the MSL catalog all discarded federal documents.
- Ensure that MSL staff can broker access to Montana related federal documents located elsewhere.

#### **E. *Reference materials***

##### Goals:

- Ensure state employees have access to reference materials necessary to do their jobs, within the context of the three topic areas comprising the MSL collection.
- Reduce staff time associated with managing the reference collection

##### Discussion:

Print reference materials similar to those maintained by MSL are available through public libraries. Similar reference materials are increasingly available on-line. Print reference items get dated quickly, especially directories. Accordingly, the MSL reference collection gets minimal use. Unless reference items are digitized or available in electronic format, maintaining a reference collection would require that MSL continue to dedicate staff resources to acquisition and processing.

##### Recommendation:

- On January 1, 2008, discontinue offering walk-in access to print reference materials.
- By July 1, 2008, weed the print reference collection heavily. Offer weeded materials to public libraries. Keep select reference materials for use by MSL staff to support answering reference questions pertaining to Montana state government, professional library development, and natural resource information. For example, retain the American Library Association directory, Montana Business Directory, and Book of the States, but deselect the Encyclopedia of Popular Music and the Dictionary of Money and Finance.

#### **F. *Nonfiction Collection***

##### 1. Print nonfiction materials

##### Discussion:

The MSL print nonfiction collection contains work-related materials.

##### Recommendations:

- On January 1, 2008, discontinue offering walk-in access to print nonfiction materials.
- Fulfill state agency needs for work-related, nonfiction materials through interlibrary loan requests.
- By July 1, 2008, weed the print nonfiction collection heavily. Offer weeded materials to public libraries.
- Keep all professional library development materials within the print nonfiction collection.



- Keep select print nonfiction materials for use by MSL staff to support answering reference questions pertaining to Montana state government, professional library development, and natural resource information about Montana.

## 2. Electronic nonfiction materials

### Discussion:

MSL currently licenses ReferenceUSA, Lexis-Nexis Environmental and State Capital, BioOne, Sanborn maps. Licensed databases get erratic, minimal use. They require ongoing promotion and user training. Insuring remote access and monitoring the annual contracts takes staff time.

MSL currently has no formal policy or procedure regarding selection of materials to include in the MSL electronic reference collection. Providing business/residential directory information lies outside the criteria of MSL's three collections.

### Recommendations:

- Develop a collection development policy that addresses licensed databases.
- Establish a minimum usage level.
- Review current databases against collection policy to determine if any should be dropped.
- Immediately discontinue database workshops.
- Starting January 1, 2008, create a series of screen-cast tutorials introducing electronic nonfiction resources.

## **G. *Journals***

### Goals:

- Ensure state employees have access to journals needed to do their job
- Reduce staff resources associated with managing print journals.
- Find alternate sources for the types of information currently found in print journals.

### Discussion:

MSL has continued to maintain a print journal collection because not all journals are yet available in an electronic format and many electronic journal subscriptions are bundled with the print journal. The print journals collection is used only minimally.

MSL has cancelled journals that are available through other means, e.g. the statewide journals database licensed by MSL for access by all Montana libraries. MSL, however, has not yet attempted inclusion of materials needed by state employees in the state wide database contract which would reduce the need for a MSL collection.

There is currently no clearly defined collection development policy for selecting MSL journals. Journals have been selected primarily upon state employee request.

Walk-in access to print journals requires circulation desk staffing and re-shelving work. Continuing to maintain print journals in our collection while discontinuing walk-in access will result in additional work for circulation staff, e.g. locating and copying journal articles. The value of keeping dead runs of cancelled subscriptions is questionable.

Recommendations:

- Continue receiving all print state publications serials.
- Before our journals subscription comes up for renewal in October 1, 2007, cancel all print-only subscriptions with the exception of PLD magazines available only in print. Where possible, eliminate the print version of print/electronic combinations. If a PLD magazine is available in both print and digital formats, cancel the print and get the digital format.
- By September 1, 2007, create a concrete collection development guide for acquisition of electronic subscriptions. Set a baseline number based on the number of times a journal is accessed and its subscription cost. Use this number to determine whether to renew that periodical.
- Prior to October 1<sup>st</sup> 2007 EBSCO fall renewal deadline, review current the subscription list against the criteria set forth in the journals collection policy. Discontinue subscriptions to those that fail to meet the criteria.
- Starting January 1<sup>st</sup>, 2008 discard upon receipt the print versions of electronic journals that are provided only as print/electronic combinations. Get remote access login information for all electronic journals.
- Discontinue natural resource information journals available only in print. Subscribe only to electronic natural resource information journals.
- By November 1, 2007 arrange with vendors for trial subscription periods that include full access to all their electronic journal titles. Market/promote this. After trial period, create a report on the most accessed titles. Subscribe to those titles if they reach the baseline number.
- Market/promote access to the 13,470 journals available in InfoTrac. Create screencast tutorials.
- Work with the Special Library representative on the Network Advisory Council to provide input on the next Request For Proposal (RFP) for Statewide Periodical Database Subscription.
- On November 1, 2007, place notices that print journals access will be discontinued as of January 1, 2008.
- Beginning January 1, 2008, remove and discard all print journals with the exception of professional library development subscriptions.
- During FY08 investigate LOCKSS potential for archival access to electronic journals.
- During FY08, investigate the potential for state employees to obtain journal access via the University system. Develop a report of findings by July 1, 2008.

## **H. *Newspaper Subscriptions***

Goals:

- Free-up resources associated with maintaining print newspapers.

Discussion:

Most of the newspapers in the MSL collection make the current issue available online and some provide archival access. InfoTrac Custom Newspapers provides archival access to Helena Independent Record, Billings Gazette, Montana Standard and hundreds of other newspapers.

Newspapers are not mentioned specifically in the MSL strategic plan. There is considerable staff time associated with daily retrieval and check-in of all newspapers from major Montana towns, discarding/recycling newspapers, and monitoring subscription payments.

Recommendations:

- On November 1, 2007, post notice in reading area that print newspaper access will cease on January 1, 2008.
- On November 1, 2007, cancel subscriptions to all print newspapers effective December 31, 2007.
- On January 1, 2008, close the newspaper reading area and discard newspaper holdings.
- Create current awareness tools webpage to inform users how to receive current news online.

## II. Library Services

### A. *Circulation Service*

Goals:

- Ensure patrons continue to have access to the MSL collection through various means, e.g. full text access through the library catalog and MSL reference service.
- Reduce FTE associated with circulating MSL collections.

Discussion:

If all other recommendations of this document are carried out, the MSL collection will be available online with noted exceptions. Circulation of print materials will therefore no longer be required.

Recommendations:

- Maintain circulation for PLD items as described earlier.
- Beginning January 1, 2008, only provide access to digital versions of state publications. Digitize print publications upon patron request within three to five working days and provide access to the digital version.

Needs:

- Obtain or contract for scanning / OCR capabilities suitable for routine digitization of state publications.
- Obtain training in scanning, OCR, and digital file management for current circulation staff.
- Investigate the potential for digitization of the entire state publications collection.

### B. *Interlibrary Loan Service*

Goals:

- Ensure state employees have access to work-related materials not available at MSL.
- Ensure non-Helena state agency employees have access to the MSL collection.
- Reduce FTE associated with ILL service.

## Discussion:

ILL service is used by only a small percentage of state workers. These individuals sometimes use the service extensively. MSL sets no restriction on the number of ILL requests made by a single individual. There is significant staff time associated with providing the ILL service.

Lending becomes unnecessary with a completely digital state publications collection. Borrowing may become less necessary over time as other institutions place more information online.

## Recommendation:

- By January 1, 2009, determine the potential to outsource ILL borrowing services.
- Fulfill state agency ILL requests for work-related materials not available at MSL.
- Beginning January 1, 2008, stop lending state publications, non-fiction, federal documents, and serials. Provide digital access to state publications.

**C. *Reference Service***

## Goals:

- Ensure state employees have continued access to the reference services they need to do their jobs.
- Reduce FTE associated with reference service

## Discussion:

Reference questions are wide-ranging in scope. No guidelines exist to guide staff in responding, or to allow staff to limit their response or refer the questions elsewhere. LIS may receive fewer reference questions regarding the MSL collection as the collection becomes more available at the patron's desktop.

## Recommendation:

- By September 1, 2008, write guidelines about how to respond to reference questions.

## Needs:

- Coordinate with LDD to ensure statewide cooperative reference service is ready to receive handoff.

**III. Public Access**

## Goal:

- Realign public access services in accordance with the transition from print library services to digital library services.
- Reduce FTE associated with monitoring public areas.

**A. *Public Reading Area***

## Discussion:

The public reading areas of the library see limited use by patrons. Although no formal records are kept, staff observes that the areas are most used by a handful of regulars comprising both state and other public patrons. It is not uncommon

for there to be periods wherein no patrons are using these areas. Because these areas are open for use during all normal business hours, public areas need constant monitoring. Lately, MSL staff has used this area for meetings, sometimes because MSL conference rooms are not available.

Recommendation:

- On November 1, post notices in the public area that these areas will no longer be provided as of January 1, 2008.

Needs:

- Install signs near stairwell indicating the non-availability of walk-in access to the stacks, public reading areas, and public access computers (PACs).
- Repurpose public reading area to become MSL work area.

## ***B. Public Access Computers (PACs)***

Goals:

- Ensure that patrons have access to MSL on-line services

Discussion:

PACs at MSL require constant MSL staff supervision and periodic maintenance by the MSL network administrator. Replacing PACs is expensive and time-consuming. All state employee patrons already have access to MSL on-line services from their state agency computers. All other MSL patrons may access MSL on-line services from their personal computers or public library computers. We have no formal evidence that the PACs at MSL are used by patrons to gain access to our collection.

Recommendations:

- November 1, 2007, post notice on PACs that they will no longer be available for general use beginning January 1, 2008.
- Repurpose the PACS.

## ***C. Wireless Printer and Public Copier***

Discussion:

Free access to a printer and copier has long been afforded to MSL patrons. Although use guidelines are posted, it is difficult to enforce printer/copier proper use policies. It is likely that patrons often use printer/copier for non library-related purposes.

State employees have access to printers and copiers within their agencies. Other Helena patrons have access at the public library and at several businesses throughout Helena.

Toner, paper, and maintenance costs continue to rise.

Recommendations:

- November 1, 2007, post notice on the copier and printer that these services will be discontinued on January 1, 2008.
- On January 1, 2008, remove the wireless printer and copier from the public area.

#### **D. *Grizzly and Bitterroot conference rooms***

Goal: Reduce staff time associated with serving as host for conference rooms

Discussion:

MSL has offered its conference rooms for use by others, as do most agencies on the capitol campus. MSL staff frequently use the conference room facilities in other agencies; reciprocating seems appropriate.

Allowing other agencies to utilize MSL conference rooms sometimes interferes with MSL use. Scheduling conference room activities adds to the workload of MSL administrative staff. Frequent questions about making coffee, turning on the computers, moving furniture, and providing directions to the bathrooms interrupt the work of LIS staff. LIS staff lock/unlock the conference door, make sure the coffee machine is unplugged, and in general, monitor conference room use.

Lab use in the Grizzly conference room by outside agencies further complicates conference room use by outside agencies. Scheduling the lab, ensuring that necessary software is loaded and that unauthorized software is restricted, troubleshooting, all take considerable network support staff time.

Recommendations:

- Continue to offer the Grizzly conference room to other state agencies as a conference room.
- By October 1, 2007, revise guidelines for lab use by others.
- Immediately discontinue making the Bitterroot conference room available to outside agencies with the exception of FWP.
- Immediately transfer administration of the Grizzly conference room to admin staff.

#### **E. *Stacks***

Goals:

- Improve preservation of the state publications collection.
- Ensure discovery and access to the MSL collection.
- Reduce the FTE associated with open stacks.
- Free up resources to increase rate of acquisition of state publications.

Discussion:

State libraries in all fifty states struggle to get state agencies to comply with state publication submission requirements. No state library in any state knows with precision how many state publications they should be acquiring, but in fact are not submitted by the publishing state agencies.

Since 2002, MSL has catalogued all state publications as acquired. Of the state publications acquired and shelved by the Montana State Library prior to 2002, an estimated 45% are not catalogued, possibly due to the legacy of an overly broad collection development policy, workload issues, state of technology then, and insufficient staffing levels. As a result, discovery of un-catalogued items on the shelves is possible only through browsing. Discovery by browsing, however, is hampered and in a real sense, not possible because most state agencies do not put document titles on their spine labels. Nonetheless, discontinuing physical walk-in access to the stacks would eliminate any chance of discovering un-catalogued items until these items are cataloged.

Recommendation:

- On January 1, 2008, discontinue physical walk-in access to stacks.

Needs:

- Install signs near stairwell indicating the non-availability of walk-in access to the stacks by non-MSL personnel.
- Make physical arrangements to discourage walk-in access to stacks by non-MSL personnel. This may require acquisition of additional furniture or repurposing existing materials, e.g. cubicle walls.
- Provide an alternate means of discovery for non-cataloged items. Until all items are cataloged, this may require more work of our current staff.

#### **IV. Digital Library Infrastructure**

MSL is trading its books and shelves for electronic files and disk storage capacity. For years, MSL has been building its internal infrastructure to enable it to meet the needs of operating a library in the electronic world. However, in order to fully meet its digital preservation and access needs, MSL must provide for more than just a protected, yet accessible, storage area. A robust infrastructure and adequate backup and disaster recovery means are but a part of the digital preservation picture. Equally important are ensuring reader privacy, fixity of electronic publications, identification of official copies, the ability to demonstrate authenticity, migration of document format as software and hardware evolve, and environment emulation to enable viewing of older versions of documents. Storage environments must enable version control, cataloging, linking of digital objects to their descriptive and preservation metadata, OCR, and full-text indexing. Storage environments optimized for archival are necessary, as are storage environments optimized for access.

MSL is able to meet some of these needs within its on-site data center and Information Technology Services Division (ITSD) will likely meet some of these needs in their proposed new data center, to be constructed over the next few years. However, for the foreseeable future, certain organizations will take the lead in examining these issues and implementing solutions in line with library and preservation needs. Two of these organizations are OCLC and the Internet Archive.

OCLC, an international library cooperative, is at the forefront in developing content acquisition, storage, and access systems that address, or have the capacity to address in the future, the digital preservation and access issues identified above. OCLC has developed solutions to some of these issues that

function in a hosted environment wherein content is stored within OCLC systems. OCLC is working toward a comprehensive hosted solution as well as solutions that will function in a local environment.

The Internet Archive is the world premier web site archive, having begun to archive the web in 1996 and recently achieving recognition by the state of California as a library.

For the past two years, MSL has contracted with OCLC to utilize its content acquisition and cataloging tools and to store its discrete document content; MSL recently contracted with the Internet Archive to manage its web-site content. MSL is working with both organizations to ensure Montana's digital preservation and access needs are met, and to ensure that MSL can retrieve the Montana content stored within these organizations data systems at any time that MSL desires to assume full control.

#### Recommendations:

- Continue to contract with OCLC and the Internet Archive for digital preservation and access purposes during FY08.
- During FY08, investigate the potential for MSL to meet its digital preservation and access needs locally.
- During FY08, verify the export capabilities of these systems; obtain representative content, load the content locally, and determine MSL's capacity to work with the content.
- By January 1, 2008, identify the upgrade pathway for MSL's on-site data storage needs.
- By June 1, 2008, and by that date in subsequent years, determine whether to continue to contract for hosted digital preservation and access services for another year.

## V. Staffing

#### Goals:

- Staffing adequate in number and qualified to accomplish the transition from a print library to a digital library
- Staffing adequate in number and qualified to ensure the long-term viability of the digital library.

#### Discussion:

Existing position descriptions are in many cases based on resources and services provided by a physical library with walk-in patrons. Transitioning from the current situation to a digital library as described in this plan will require the knowledge, skills and abilities of staff well-versed in processing print materials as well as staff qualified to continue the implementation of electronic equivalents to these print-based processes. At the end of the transition process (June 30, 2008), the need for print-based information processing will diminish significantly. Throughout the transition process the need for staff qualified to identify, acquire, manage, catalog, preserve, and provide access to electronic information resources will grow.

#### Recommendations:

- Immediately advise LIS staff of the changing nature of MSL's staffing needs as pertains to the transition described in this document. (done August 7, 2007).
- By December 1, 2007, develop staffing plan generally describing the staffing necessary to ensure the success of the digital library.
- Throughout the transition period, fill open positions as deemed necessary on a case by case basis.



- During the Executive Planning Process (EPP) in preparation for the 2009 legislative session, communicate any staffing needs beyond the currently authorized seven FTE to the Governor's Office of Budget and Program Planning.
- By February 1, 2008, modify job profiles for all currently authorized positions as necessary and draft job profiles for new positions, if any, requested through the EPP process.
- By March 1, 2008, advise LIS staff of any anticipated effects of this transition on their position within MSL.
- By July 1, 2008, align current positions with the staffing plan.